

Cotton Yields *Top Nation*

Arizona has become an important cotton-growing State during the past several years when cotton was much in need throughout the Nation.

The heavy line in the chart below is the success story of short-staple cotton in Arizona! Over a period of 29 years the yield of lint cotton per acre has more than doubled. During the last four years, no other cotton-growing area in the United States has had acre yields as high as those in Arizona.

Most of the ups and downs in the yield curve have reasonable explanations. When first grown in Arizona, cotton was a new crop for irrigated farms. During the "infancy" stage, the Agricultural Experiment Station of the University of Arizona and cooperating federal agencies were developing new varieties and cultural practices to adapt cotton growing to local conditions.

By 1934, the results of research to learn new facts began to pay off. Farmers accepted and put into practice new methods of raising cotton. Land leveling to conserve and utilize water to best advantage,

better timing of irrigations, and the beginning of control of insects harmful to cotton all helped.

The first substantial rise in lint yields stopped when World War II began. Fertilizers became scarce and insecticides were of poor quality. As a result, yields decreased. With the end of the war, fertilizers once again were available and some of the new insecticides developed during the war years came into use.

These highly effective insecticides, coupled with the increased use of fertilizers and better cultural practices, brought lint yields to a new high in 1950. A statewide average of 900 pounds per acre was an almost unbelievable achievement to old hands in the cotton-growing industry. The national average was only 269 pounds of lint per acre in 1950.

The widespread use of the new University of Arizona variety, Acala 44, which was first grown commercially in 1951, has improved cotton quality. Because of its better spinning value, acre yield and staple length, Acala 44 put more than \$6,200,000 of extra earnings into the Arizona cotton growers' pockets in 1952.

